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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,152	07/03/2001	Michael Wen-Chein Yang	POLY-1193	7052

7590 07/13/2004

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EXAMINER
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HAMILTON, CYNTHIA

ART UNIT	PAPER NUMBER
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1752

DATE MAILED: 07/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/898,152	YANG ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Cynthia Hamilton	1752	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 March 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15, 17-20, 22, 26, 27, 30-39, 42 and 44-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 30-39, 42, 44, 45, 50 and 51 is/are allowed.
- 6) ☒ Claim(s) 15, 17-20, 22, 26-27, 46-49, 52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

1. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

Applicants' failure to present a petition to accept an unintentionally delayed claim for priority under 35 U.S.C. 120 and 121 as required under 37 CFR 1.78 (A)(2) with respect to the addition of SN: 08/479,399

2. The benefit claim filed on March 9, 2004 was not entered because the required reference was not timely filed within the time period set forth in 37 CFR 1.78(a)(2) or (a)(5). If the application is an application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the reference to the prior application must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a nonprovisional application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the reference to the prior application must be made during the pendency of the application and within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). If applicant desires priority under 35 U.S.C. 120 and 35 USC 121 based upon a previously filed applications, applicant must file a petition for an unintentionally delayed benefit claim under 37 CFR 1.78(a)(3) or (a)(6). The petition must be accompanied by: (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted); (2) a surcharge under 37 CFR 1.17(t); and (3) a statement that the entire delay

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between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

3. The Effective filing date of this application remains August 4, 1997, which is the filing date of 08/905,654. Because a granted petition of unintentional delay in adding SN 08/479,339 to the list of parent applications is not of record in this application the date of June 7, 1995 or June 25, 1993 of 08/082,689 is not granted.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 15, 17-20, 22, 26-27 and 46-49 and 52 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Fan (6,238,837 B1).

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Applicants have amended the Markush group of binder in claim 15 to exclude cellulosic binders thus removing the issue of anticipation from the originally submitted claims. However, with respect to the use of polyimides, polyesters, polymers of ethylene, polybutylene, polyacrylics, polyethylene, polyphenylene ethers and polyethylene oxides, Fan in col. 9 lines 40-58 disclose their use in his IR ablatable layers. Fan cited by applicants has a filing date of May 1, 1995 which is before the filing date of the oldest effective date, i.e. August 4, 1997. Thus, Fan is seen as prior art under 35 USC 102(e). Thus, the examples of Fan anticipate the instant processes of claims 15, 17-20, 22, 26-27, 46-49 and 52, and in the alternative the use of any of the binders as set forth in Fan in column 9 in the IR ablatable layers, i.e. a species of laser ablatable layers, set forth would have been prima facie obvious because they were taught by Fan et al as being suitable. Fan anticipates the instant process wherein butadiene-styrene block polymers are listed as one choice of binder in the photopolymerizable layer. The examiner notes that Fan does not claim a process and the element claimed by Fan is limited to the presence of a monomer as well as an elastomeric binder. However, the process of imaging with an infrared ablatable layer comprised of a binder that can be a polyamide is disclosed and is a species of that claimed by applicants. In Fan, see particularly Abstract, col. 2, lines 8-10, 23-28, col. 3, lines 48-65, col. 4, lines 20-31, 55-61, col. 5, lines 65-67, col. 6, lines 1-35, col. 7, lines 55-63, col. 9, lines 10 through col. 10, lines 48, col. 12, lines 8- col. 13, lines 40 and examples and claims.

1. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scott Paper Company (GB 1,492,070) and in view of the Murphy Declaration filed October 24, 2002 further in view of Law et al (4,492,750). Scott Paper Company discloses on page 1, lines 66-79 a presensitized planographic printing plate having a layer of material which is sensitive to

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ultraviolet light, is provided with a coating which is opaque to ultraviolet light and is capable of being removed or rendered transparent to ultraviolet light by non-UV laser radiation. The layer that is sensitive to ultraviolet light is disclosed as any one of the commercially available types of either positive working or negative working plates. The nature of the presensitized printing plate portion of the plate of the Scott invention is not critical for the reason that once the mask is formed in situ and the plate is exposed to ultraviolet light, development proceeds in a conventional manner. The layer of material which is opaque to ultraviolet light and capable of being removed or rendered transparent to ultraviolet light by non-UV laser radiation can be a dispersion of metal or carbon particles in an organic binder. The opaque layer must be thick enough to be opaque to ultraviolet while remaining thin enough to be vaporized and removed rapidly with a minimum amount of radiant energy applied by the laser for this purpose. Scott Paper Company discloses this in the paragraph bridging pages 1-2. Scott Paper Company also discloses selection of an appropriate laser for removing the layer of material which is opaque to ultraviolet light is well within the skill of the ordinary worker in the art to which their invention pertains. Means for modulating a laser beam to record information on a substrate is well known also. Scott Paper Company goes on to disclose "In general they can be characterized as scanning mechanisms which cause the beam to traverse the area, delivering energy in a predetermined manner." Scott Paper Company has an example of a photopolymerizable layer wherein carbon black is the UV absorbant and Nitrocellulose is the binder. Carbon black is well known in the art to be an infrared absorber as well. The only working example of Scott Paper Company also like the instant applicants uses a binder not in the list given. Scott Paper Company teaches the instant element of claim 15 with the exception of the binders given in the instant claims and not

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specifically mentioning using an IR laser for the ablation. With respect to instant claims 15 and 16, the examiner states in view of Mr. Murphy's expert opinion that the disclosure of one IR ablatable layer in the materials of the 1993 application as being sufficient to give support for the instant claims which have no binder in common with the disclosure of the sole IR ablatable material disclosed functional enough to form a working plate, then the disclosure of Scott Paper Company is sufficient to make obvious the use of any binders used in non-UV laser radiation ablatable layers known in the art before the 1993 disclosure as well as any ultraviolet lithographic negative acting presensitised plates known before the 1993 disclosure, because the predictability of the art at the filing of the 1993 disclosure is so predictable to allow such breadth of obviousness. Law et al teach one kind of laser ablatable layers known at the time of the 1993 disclosure. Law et al make use of polymeric binders inclusive of polyesters, polyacrylates, polymethacrylates, and polycarbonates mixed with IR absorbing compounds to make laser ablatable layers. With respect to instant claim 15 and to Scott Paper company and in view of Mr. Murphy's declaration as to the level of skill in the art, the use of known ablatable layers such as those of Law et al as the non-ultraviolet removable layer of Scott Paper and thus be used in the processes of Scott Paper would have been the prima facie obvious use of an art recognized available laser removable material as directed by Scott Paper. In Law et al, see particularly the abstract, col. 5, lines 9-25, col. 7, lines 12-23. The examiner notes that while applicants in the instant application do not define photopolymerizable, they do not limit photocurable to exclude such "curing". The use of an IR laser to ablate is a species of any ablating laser. Thus, the rejection is still valid as a species of the instant process.

7. Applicant's arguments filed March 9, 2004 have been fully considered but they are not persuasive. Applicants resubmitted the Kanga Declaration with Exhibit letters. The examiner does not see the letters in the filed electronic copies set forth in the USPTO IFW system, i.e. the imaged data objects made of the papers filed by applicants and given for this examiner to respond to applicant. She does not know if there are tags that are missing or tags that were not copied from the papers submitted by applicants. In either case, the examiner has no tags to reference in the resubmitted Declaration. Applicants have removed the species of infrared ablation layers from the instant claims and have removed the issue of photopolymerizable layers by amendment of the claims. Thus, applicants have established a filing date of August 4, 1997, which is still not previous to the filing date of Fan of May 1, 1995. Rejections over Fan stand because of this. Applicants argue that rejections of claim 15 are mooted by the claim amendments. There is no explanation as to why the rejection is moot. Therefore it stands.

8. Claims 30-39, 42, 44-45 and 51 are allowed.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,



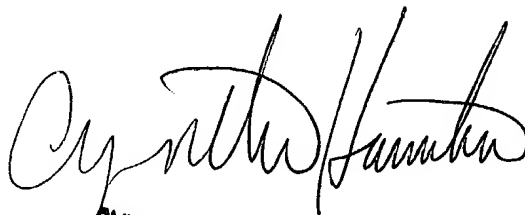
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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Hamilton whose telephone number is 571-272-1331. The examiner can normally be reached on Monday-Friday, 9:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Cynthia Hamilton  
Primary Examiner  
Art Unit 1752

July 9, 2004

**CYNTHIA HAMILTON  
PRIMARY EXAMINER**